

**SECOND RANGE STATE MEETING OF THE CMS
CENTRAL ASIAN MAMMALS INITIATIVE (CAMI)**

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**PROPOSAL TO INCLUDE THE URIAL *OVIS VIGNEI* IN THE
PROGRAMME OF WORK 2021-2026 FOR THE CENTRAL ASIAN MAMMALS INITIATIVE**

(Prepared by the Republic of Tajikistan)

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Proposal

To revise Resolution 11.24 (UNEP/CMS/COP11) to include the urial *Ovis vignei* in the Programme of Work 2020-2026 for the Central Asian Mammals Initiative (CAMI) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS).

The urial is proposed for listing in Appendix II at the CoP13. The joint proposal has been submitted by the Islamic Republic of Iran, the Republic of Uzbekistan and the Republic of Tajikistan.

Proponent

Republic of Tajikistan

Rationale for the proposal

Taxonomic note

The CMS standard taxonomic reference Wilson and Reeder includes urial in *Ovis aries*, the name of the domestic sheep. For reasons of clarity the name *Ovis vignei* is preferred for the following reasons:

- Wild species according to the rules of zoological nomenclature should not be named with the same name as domestic species. Thus mouflon and urial would be named *Ovis orientalis* (ICZN 2003; Gentry et al., 2004)
- Urial *Ovis vignei* is not an ancestor of domestic sheep *Ovis aries*. (Hiendleder et al., 1998; Rezaei et al. 2010)
- Mouflons and urials are different species because of differences in the number of chromosomes: mouflons have 54, urials have 58 and morphological differences. (IUCN/SSC Caprinae Specialist Group 2000)
- The name *Ovis orientalis* has first been applied to a hybrid of urial and mouflon and can therefore not be applied to any of the two species. The valid name for urial is therefore *Ovis vignei*. (Damm and Franco, 2014)

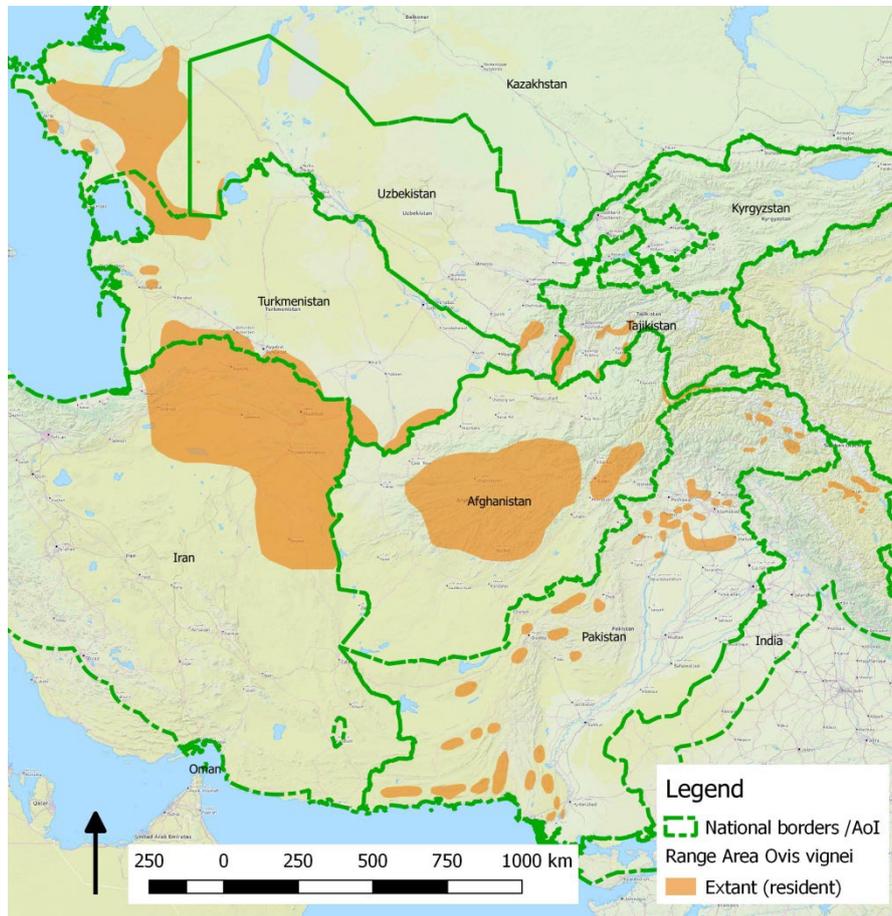
For these reasons this proposal applies the name *Ovis vignei* for urial. This species name allows for a clear identification of the taxon proposed for inclusion in Appendix II of the CMS and in CAMI. The identified stable, naturally occurring hybrid populations of *Ovis vignei* and *O. gmelini* are not part of this proposal.

The taxonomic status of several subspecies, their geographic distribution and the belonging of distinct populations to these are debated (IUCN SSC/Caprinae Specialist Group 2000). Units for assessment and conservation managements are therefore often defined pragmatically either by Range States or the geographic range where the respective populations or subpopulations occur.

Distribution

The urial is a wild sheep distributed across Iran, southern Central Asia, and the western part of South Asia. Its range area is entirely within the area covered by CAMI. The range areas shown in the map based on the special data from The IUCN Red List are of highly varying accuracy. Most range areas indicated as “extant” are very generalized and the actually occupied areas are much smaller. This concerns in particular the large blocks in the Ustyurt between Aral Sea and Caspian Sea, in northern Iran and Afghanistan. The areas indicated as “possibly extant” consist in a large extent of unsuitable areas and there only some small patches of actual urial range areas can be expected. On the other hand several patches of range area are missing from the map, e.g. in the southeast of Iran, where urials are most likely occur across the border with Pakistan.

The Extent of Occurrence stretches from the east of the Alborz Mountain Range in Iran, the western coast of the Caspian Sea in Kazakhstan and Turkmenistan in the east through the mountains and hills of Iran, Afghanistan and Central Asia to the Ladakh in the western Himalayas of India. Within this area urials are found in patches of suitable habitat, where not exterminated. Thus the overall range of the species is very fragmented and most populations are isolated.



Range area, based on The IUCN Red List

Population size and trends

The most recent assessment of their conservation status in The IUCN Red List treated urial and mouflon as one single species *Ovis orientalis*. This species is listed as Vulnerable (Valdez, 2008). The reassessment for The IUCN Red List is challenged by insufficient coverage and quality of available data from most parts of the range. Most population data are educated guesses or refer to small areas only. Increases in reported numbers may sometimes rather reflect increase in search intensity than an actual increase in population size. Data availability for distinct time periods is not sufficient to provide a reliable indication of size and trends of global population size. Valdez (2008) reported declines from various range areas, but did not provide a global population estimate. The current draft reassessment suggests listing *Ovis vignei* separated from mouflon *Ovis gmelini* as Vulnerable under criterion A2bcde because it is believed to be declining by at least 30% over three generations (set at 24 years) due to poaching and habitat deterioration. (Michel, IUCN SSC Caprinae SG Red List Authority, pers. comm. 2019)

Available information suggests that urial populations are fragmented and many populations are small and/or declining. Overall declines of the number and range areas are reported from all range states. For instance, in Turkmenistan rapid declines happened during the last years, with Rustamov (pers. comm. 2018) reporting an overall decline from 6,100 to less than 3,000 and local declines by up to 90%. Ismailov (pers. comm., 2019) indicated declines by more than 70% in Kazakhstan during the last 20 years. Stable and increasing populations exist possibly in few areas, like in the Wakhan of Afghanistan, some protected areas in Iran, in India and in areas with community-based hunting programs in parts of Pakistan.

Due to the lack of comparable national and global population estimates it is not possible to present overall rates of decline since the last assessment under The IUCN Red List. However, information on local trends, continuing persistence of threats and increasing land-use pressure on urial habitat justify the assumption of a continuing decline by at least 30% over three generations, qualifying for the category Vulnerable under criterion A2bcde.

Migrations and significance of transboundary populations

Urial are known to migrate over distances of several ten to more than hundred kilometres. Such migrations can be seasonal or irregularly, related to availability of forage, water or critical habitat features. Such migrations are so far poorly studied, but are known from different parts of the range area and reported particularly by rural people and traditional hunters.

Urials have been observed at distances of more than hundred kilometers from core range areas. This may concern males, which in search of mates during the rut season migrate over long distances, but also entire herds have been observed. Such dispersal migrations may facilitate the recolonization of range areas, where the species went extinct, genetic exchange and possibly under climate change conditions even the colonization of new range areas. Different climate change scenarios predict increasing aridity, which may render portions of the current habitat uninhabitable.

From Uzbekistan migration from the Kugitang Range into Kashkadarya region and Turkmenistan (Kholikov and Mamarazhabov, 2016) as well as Kazakhstan and Turkmenistan in the Ustyurt (Marmazinskaya, pers. comm. 2019, Pestov, pers. comm. 2019) have been documented. In the Babatag between Tajikistan and Uzbekistan regular cross-border migration is highly likely. In the Wakhan of Afghanistan local people reported about urials moving across the border with Pakistan at Baroghil pass (Michel et al., 2009). Also in other parts of the range, urial populations occur in border areas and are regularly moving across national borders, e.g. in the Kopetdagh (Iran/Turkmenistan), Iran/Pakistan, Karakoram/Hindukush/Himalayas (Afghanistan, India, Pakistan).

Threats

The main reasons of decline are:

- Poaching is the main threat across the range of the species. In addition to the mortality it causes it makes the urial more wary of human presence and as urial habitat typically is used for various land uses large tracks of suitable habitat become unavailable for the species.
- Capture of lambs as pets and for sale contributes to reduced recruitment in already small populations.
- Competition with domestic livestock and habitat degradation certainly limit urial population sizes and, e.g., in Ladakh of India it is the main threat for urial (Raghavan et al. 2003).
- Domestic dogs might be a threat where urials inhabit areas with human and in particular herders presence.

- Transformation of habitat by deforestation, changing of land use, crop cultivation, extractive industries, urban and infrastructure development threatens urial populations through habitat loss, increasing poaching pressure and barriers to migration. In the mid- and long-term climate change will affect habitat quality and availability mainly by increasing aridity reducing available forage and water sources and increasing competition with livestock and agriculture.

Barriers to migration include border fences, but also development of extractive industries, linear infrastructure and urban areas. Furthermore, poaching and related disturbance hamper migration. These barriers prevent access to critical habitat, reducing the fitness and survival rates in the respective populations. They affect recolonization and genetic exchange and in regions with scattered small areas of suitable habitat overall habitat availability is thus reduced. The continuous and impenetrable fencing along the disputed Line of Control between India and Pakistan is a significant barrier to the movement of the Ladakh urial. Populations of Turkmenistan are potentially transboundary with Afghanistan, Iran, Kazakhstan and Uzbekistan, but movements are hindered by border fences.

Expectations with regard to including the species into CAMI

The listing of urial *Ovis vignei* in Appendix II of the CMS will allow for its inclusion in CAMI and the related Program of Work. It will by this enhance national and subnational conservation efforts for the species and complement these by multilateral and bilateral activities. The species is threatened despite national protection laws being in place. Many anthropogenic factors that have led to an unfavourable conservation status act locally, but are similar across the range of the species and have cumulative impact. They can therefore better be addressed in the frame of cooperation across the range states by exchanging experience and coordinating conservation efforts. The existing listing in Appendices I and II under CITES is suitable, but may deserve amendment for including all urial in one appendix and providing more clarity with regard to taxonomy and related enforcement issues. Inclusion of urial in CAMI will particularly facilitate conservation action for the mitigation of barriers to migration, including the modification of border fences, and the conservation of transboundary populations of the species and their habitats.

As a large herbivore, urial is a keystone species in its ecosystems. It influences vegetation through grazing and seed dispersal. Urial is an important prey species for several carnivore species, including snow leopard *Panthera uncia* (CMS Appendix I, CAMI) and leopard *Panthera pardus* (CMS Appendix II, proposed for inclusion in CAMI). The listing of urial in Appendix II of the Convention, its inclusion in CAMI and resulting conservation improvement will thus benefit these two species directly, which are both Vulnerable.

Proposed priority activities in relation to the urial for inclusion in the CAMI Programme of Work 2020-2026

Assessments and Action Plans

- Support the CAMI Range States in the gathering / updating of data on range areas and populations of urial for national and The IUCN Red List assessments;
- Assist CAMI Range States in including conservation of urial in national conservation strategies and action plans

Hot Spots for intervention and conservation activities

- Identify priority areas for transboundary conservation and collaboration; and

- Work with relevant national agencies to gain an understanding of corridors and barriers to connectivity, such as border fences, and develop mitigation options including the protection of migration corridors;
- Assist in the establishment and/or support of a network of well-managed protected and game management areas, including community-managed areas and transboundary areas;
- Explore options to address habitat loss, e.g. by regulation of grazing, incentivizing the conservation, rehabilitation and sustainable of natural rangeland and woodland vegetation;
- Develop sustainable use models, including tourism and regulated hunting that incentivize local land users and communities to prevent poaching and to conserve urial in coexistence with other land uses;
- Develop, test and implement approaches that reduce conflict caused by crop raiding through prevention and compensation of damages (crop selection, scaring off from sensitive crops, benefit sharing from sustainable use).

Research and monitoring

- Develop systems for monitoring of urial range areas, population sizes, habitat suitability and impact of land use and climate change;
- Study migrations and connectivity between populations, e.g. by DNA sampling and the use of satellite telemetry;
- Study risks of urial-livestock disease transmission risk and elaborate response protocols;
- Support communication and information exchange across the Range States, especially in case of transboundary populations.

Capacity-Building

- Develop training programs in wildlife conservation in partnership with IUCN SSC Caprinae Specialist Group for students and emerging conservationists; and
- Launch annual/biannual wildlife conservation meetings for Central Asia as a continuous forum for wildlife conservation in the region.

Awareness Raising

- Promote urial as a flagship species for wildlife and ecosystem conservation in its current and former habitats; and
- Raise the knowledge of the broad public and decision makers and encourage conservation action by promoting the urial and its subspecies as symbol of local, subnational and national identity development.

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